DEPARTMENT of ENVIRONMENTAL SERVICES
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake:	REYNOLDS POND	Lake Area (ha):	7.73
Town:	LITTLETON	Maximum depth (m):	2.4
County:	Grafton	Mean depth (m):	0.9
River Basin:	Connecticut	Volume (m^3):	64500
Latitude:	44°19'02" N	Relative depth:	0.8
Longitude:	71°53'35" W	Shore configuration:	1.57
Elevation (ft):	1041	Areal water load (m/yr):	7.18
Shore length (m):	1530	Flushing rate (yr^{-1}):	8.40
Watershed area (ha):	119.8	P retention coeff.:	0.60
% watershed ponded:	0.0	Lake type:	natural w/dam

BIOLOGICAL:		16 February 2000	4 August 1999
DOM. PHYTOPLANKTON (% TOTAL)	#1	NO WINTER PLANKTON	MICROCYSTIS 40%
	#2	ANALYZED	GOMPHOSPHAERIA 8%
	#3		FILA BL-GR SPP 8%
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			4.58
DOM. ZOOPLANKTON (% TOTAL)	#1		CONOCHILUS 46%
	#2		CLADOCERAN SPP 46%
	#3		
ROTIFERS/LITER			48
MICROCRUSTACEA/LITER			48
ZOOPLANKTON ABUNDANCE (#/L)			105
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			1.8
BOTTOM DISSOLVED OXYGEN (mg/L)		12.5	8.0
BACTERIA (E. coli, #/100 ml)	#1		1
	#2		3
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m^3) : None
Anoxic volume (m^3) : None

CHEMICAL:

Lake: REYNOLDS POND
Town: LITTLETON

	16 February 2000		4 August 1999		
DEPTH (m)	1.5		1.0		2.0
pH (units)	6.8		7.4		7.5
A.N.C. (Alkalinity)	18.9		21.4		21.1
NITRATE NITROGEN	0.05		< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.34		0.70		0.50
TOTAL PHOSPHORUS	0.007		0.010		0.011
CONDUCTIVITY (μmhos/cm)	67.5				63.0
APPARENT COLOR (cpu)	32		35		35
MAGNESIUM			1.32		
CALCIUM			10.0		
SODIUM			1.7		
POTASSIUM			0.45		
CHLORIDE	2		2		2
SULFATE	6		3		3
TN : TP	56		70		45
CALCITE SATURATION INDEX			1.6		

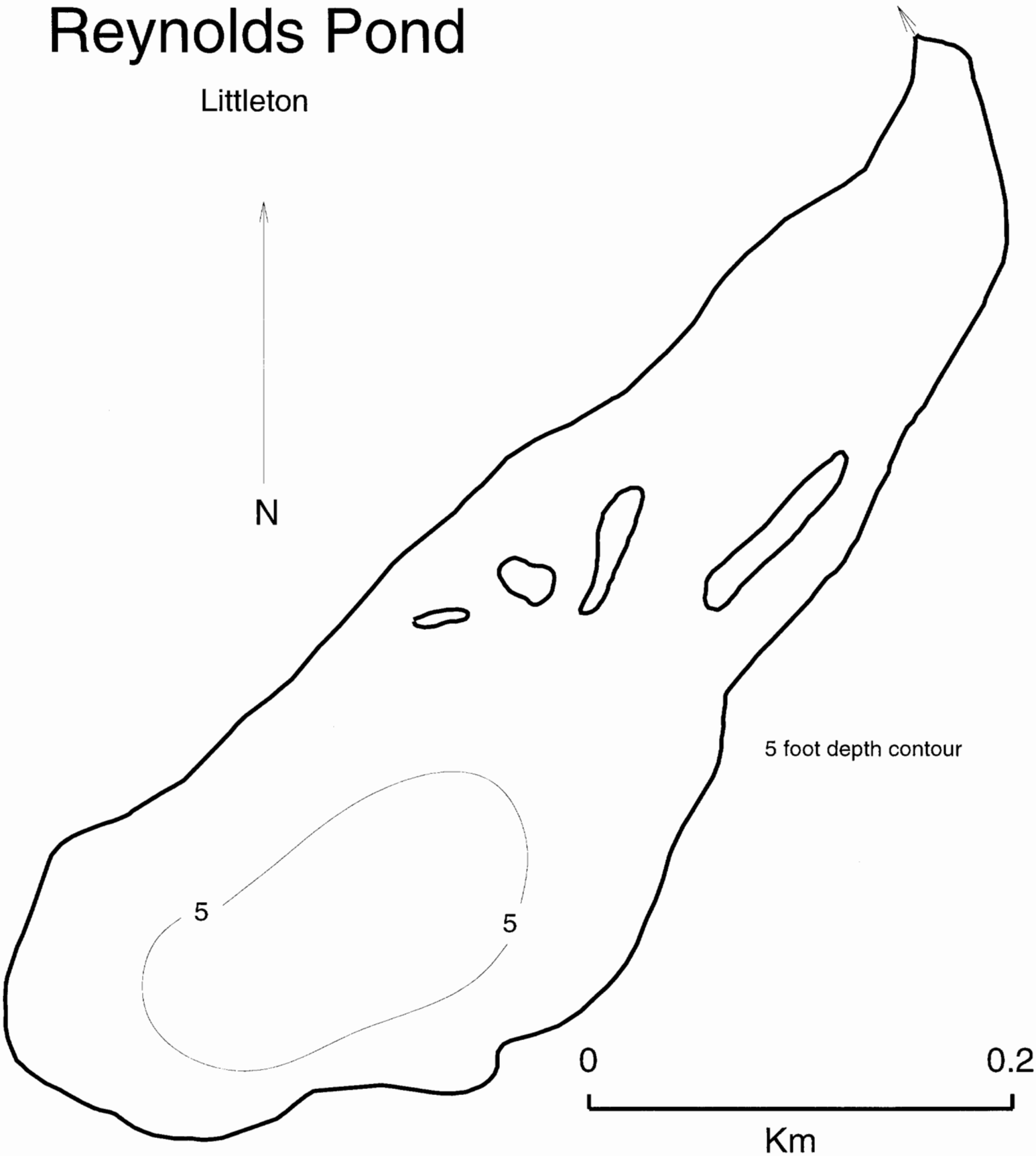
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1999

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	4	1	1	6	Meso.

COMMENTS:

1. No boat launch. Canoe was put in at the outlet over private property.
2. No development. One house was located about 100 yards down the outlet stream. Pond was surrounded by trees and many stumps were observed along the waterfront.
3. This is a shallow, highly tea-colored, circum-neutral pond with a relatively high ANC for a New Hampshire pond. Calcium was also high.
4. A small earth/rock dam about 3 to 4 feet high with a sluiceway was present.
5. A good variety of net phytoplankton were present – at least 25 different genera were observed. Blue-greens dominated (67% of all genera) with *Microcystis* the most abundant (40%). The total algal biomass (chlorophyll) was average.


Reynolds Pond
Littleton
N
5 foot depth contour
5
5
0
0.2
Km

FIELD DATA SHEET

LAKE: REYNOLDS POND TOWN: LITTLETON
DATE: 08/04/1999 WEATHER: overcast, cool

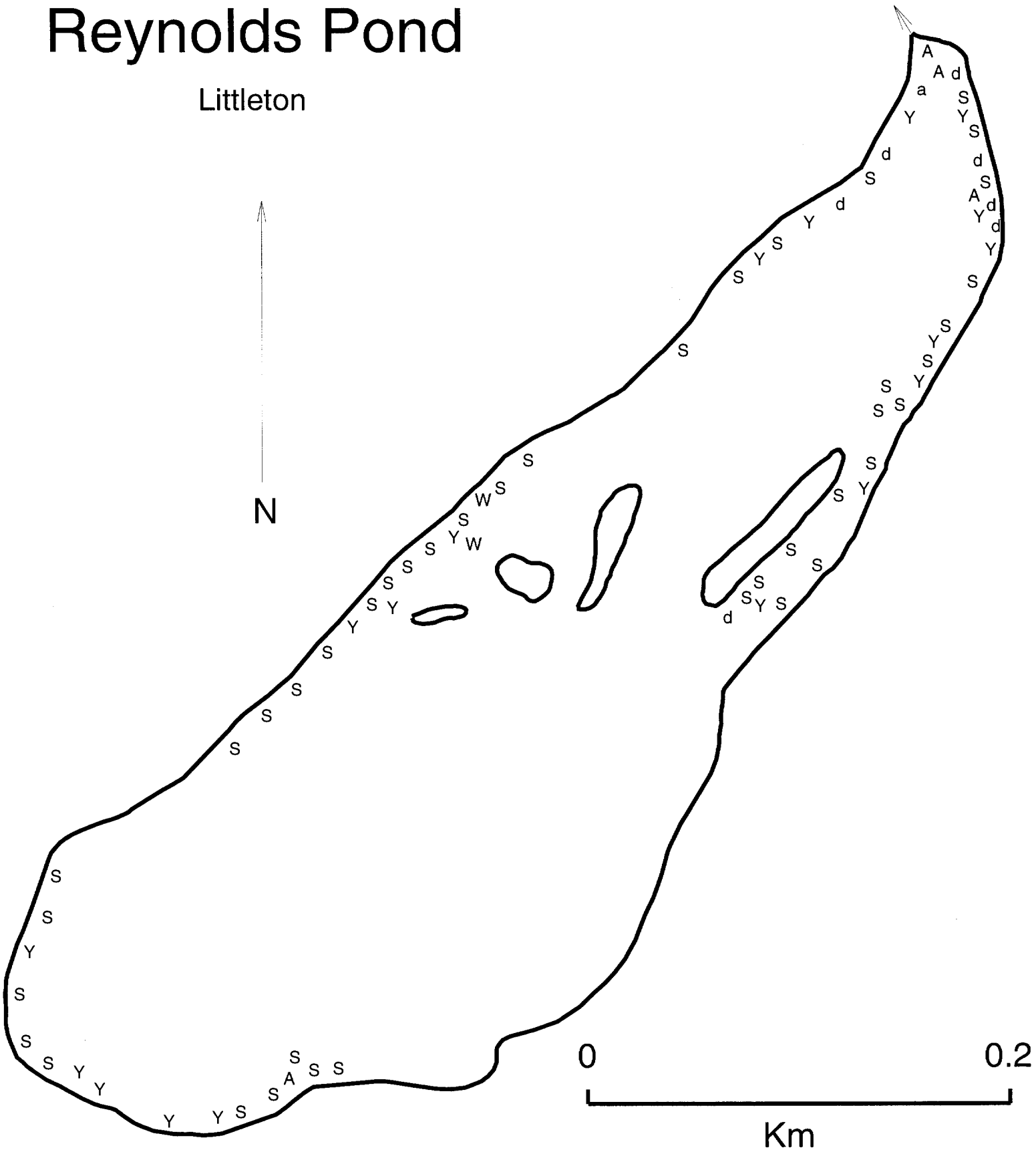
	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	23.1	8.0	93 %
	1.0	23.1	8.0	93 %
	2.0	23.0	8.0	93 %

SECCHI DISK (m): 1.8 COMMENTS:
BOTTOM DEPTH (m): 2.3
TIME: 1114

*Dissolved oxygen values are in mg/L

Reynolds Pond

Littleton



AQUATIC PLANT SURVEY

LAKE: REYNOLDS POND TOWN: LITTLETON DATE: 08/04/1999

Key	PLANT NAME		ABUNDANCE
	GENERIC	COMMON	
d	Dulichium arundinaceum	Three-way sedge	Scattered
S	Sparganium	Bur reed	Scattered
Y	Nuphar	Yellow water lily	Scattered
A	Sagittaria	Arrowhead	Sparse
a	Peltandra virginica	Arrow arum	Sparse
W	Potamogeton	Pondweed	Sparse

OVERALL ABUNDANCE: Scattered

GENERAL OBSERVATIONS:

1. This is a very shallow pond with a mucky bottom.
2. Fishing is reported good, particularly pickerel.